

REMARKS

Claims 1-9 and 27-34 stand rejected under 35 U.S.C. § 103(a). In this regard, the Examiner contends in the August 13, 2004 Office Action that independent Claims 1 and 27 are obvious in view of United States Patent No. 6,317,777 to Skarbo et al. in view of United States Patent No. 6,236,996 to Bapat et al. and “Microsoft Office 97 Introductory Concepts and Techniques” by Vermaat. Applicant respectfully disagrees with the Examiner’s contention and respectfully submits that independent Claims 1 and 27 and all claims depending directly or indirectly therefrom are in condition for allowance.

Independent Claims 1 and 27 are directed to computer implemented collaboration systems that allow for single-user and multi-user collaboration wherein information from one or more data sources are extended in a general, shareable, updateable and synchronizable manner. The information and extended properties associated therewith are provided in a fully self-describing manner such that any client tool is capable of interpreting them. Further, the collaboration systems of Claims 1 and 27 permit different sets and values of extended properties to be provided based on a user’s problem space (conference), as well as allowing sharing, updating and synchronization to apply both to multiple views of the information by a single user and multiple views of the information by multiple users.

More specifically, the computer implemented collaboration system of independent Claim 1 includes a data management tier, a repository tier, a user interface tier, and a services tier. The data management tier includes at least one data source. The repository tier includes at least one repository server that is associated with the data source and is enabled for accessing data items within the data source using access methods native to the data source to create a document including data items from the data source that is associable with at least one conference accessible to a plurality of participants. The user interface tier includes at least one client tool that is enabled for displaying the data items within the data source on a user terminal connectable with the computer implemented collaboration system. The services tier includes at least one data channel server that is associated with the document. The data channel server is created when the document is associated with the conference and provides an interface between the repository server and the client tool. The collaboration system further includes at least one extended property that is associated with each data item in the data source. The extended property is maintained within the data channel server and is available for display by the client tool only.

within the conference with which the document is associated.

The computer implemented collaboration system of independent Claim 27 includes at least one repository server, at least one document server, at least one client tool and at least one data channel server. The repository server is associated with at least one data source and is enabled for accessing data items within the data source using access methods native to the data source. The document server provides at least one interface for creating a plurality of documents, with each document representing selected data items within the data source and being associable with at least one conference. The client tool is enabled for displaying the data items represented by each document on a user terminal connectable with the computer implemented collaboration system. The data channel server provides an interface between the repository server and the client tool and is created upon association of a document with a conference. The data channel server is further enabled for maintaining an instance of at least one extended property associated with each data item represented in a document, with the extended properties being available for display by the client tool only within a conference with which a particular document is associated.

Collaboration systems in accordance with the limitations of Claims 1 and 27 provide for the creation of documents that represent selected data items from data sources via associated repository servers that employ access methods native to the data sources. By associating the documents with a conference, participants can collaboratively access and manipulate data from multiple data sources at the same time to solve a common problem. In this regard, extended properties associated with the data items included in the documents are maintained within a data channel server separate from the repository server that accesses the data items from the data sources. Maintaining the extended properties within the data channel server separate from the repository server provides the advantage of allowing for single user and multi-user collaboration without requiring that client tools be enabled for direct communication with one another or even have any knowledge of each other. Furthermore, extended properties are only displayed by the client tool within the conference with which a document is associated.

In contrast to the collaboration systems of Claims 1 and 27, Skarbo is directed to a document-collaboration videoconferencing system in which a local presenter computing system transfers a document to a document server over a network and the conferencing system copies the document over the network from the document server. (Skarbo Col. 1, lines 53-60). As

noted by the Examiner, Skarbo does not teach creating at least one document including data items selected from at least one data source, nor does Skarbo teach having at least one extended property associated with each data item in the data source, with the extended property being maintained in the data channel server and available for display only within a conference with which the document is associated. However, these are not the only limitations of Claims 1 and 27 that are not taught by Skarbo.

Applicant respectfully submits that Skarbo also does not teach the limitation of creating the data channel server that is associated with a document upon association of the document with a conference. Skarbo discloses that the document server is implemented on a server as a combination of web page templates 118, extension DLL(s) 112, and server scripts 120 and that the document server extension DLL(s) 112 provide the necessary Internet Server API (ISAPI) entry points to interface with web servers that require ISAPI. (Skarbo, Col. 3, lines 30-36). However, in discussing the various characteristics and uses of the extension DLL(s) 112, Skarbo makes no mention that they are created upon association of a document with a conference. In fact, Skarbo discloses that upon successful login or account creation, HTTP data for the browser presentation page 198 is returned by the extension DLL, and includes a list of the user documents stored on the document server. Before a document is allowed into the presentation file list (e.g., the list of files to use during the conference) from the document server file list, the video conferencing software can check to verify that an associated application exists on the computing device for each file. If no related application exists, the user is prompted whether to add the document anyway. (Skarbo, Col. 7, lines 48-65). Thus, in order to return to the user a list of stored documents upon login, Skarbo's extension DLL exists before allowing a document stored on the document server into the presentation list.

Bapat is directed to a system and method for controlling access to managed objects in a computer network. An access control database has access control objects that collectively store information that specifies access rights by users to specified sets of the managed objects. The specified access rights include access rights to obtain management information from the network. An access control procedure limits access to the management information stored in the database tables using at least one permissions table. (Bapat, Col. 3, lines 15-33). As such, Bapat is not directed to or concerned with single or multi-user document sharing and collaboration. In this regard, the user access rights stored in the tables of Bapat differ from the extended properties

of Applicant's invention. The extended properties in Applicant's invention are employed in the client tools when displaying the data items (e.g., visualization properties such as color or symbol or control properties such as reporting tasks). In contrast, the entries in the permissions tables of Bapat identify the user name whose rights are defined in the entry, the managed object to which the permission entry applies, and the type of operation such user may perform with respect to the object, including select, delete, insert or update operations. (Bapat, Col. 26, lines 34-40). As such, the user access rights of Bapat are concerned with what rights, if any, a user has to effect an operation on a managed object, and Bapat's user access rights are not directed to properties that are used by a client tool in displaying data items within a collaborative conference.

Given the noted deficiencies in Skarbo and Bapat, combining the teachings of Skarbo, with Vermaat and Bapat does not achieve Applicant's invention as claimed in Claims 1 and 27. Furthermore, even if Skarbo, Vermaat and Bapat did not have the noted deficiencies, there is no motivation or suggestion present in Skarbo or Bapat that would cause one skilled in the art to combine the teachings of Skarbo with Vermaat and Bapat. While Skarbo is directed to a document-collaboration videoconferencing system, Skarbo does not recognize the need, as the present Applicant has, for maintaining extended properties used by client tools in displaying data items included in the documents on which users are collaborating separate from the data items in order to facilitate collaboration on the same data items in multiple conferences. Additionally, Bapat is concerned with which users have access rights to perform operations on managed objects and not with how data items are displayed by client tools in a collaborative environment.

Since, as discussed above, independent Claims 1 and 27 are in condition for allowance, there is no need to separately address the patentability of the claims depending directly or indirectly therefrom. In this regard, Applicant believes that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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